

ABSTRACT OF THE DISCLOSURE

A complex comprised of at least one negatively charged nucleic acid and at least one positively charged polymeric conjugate with the bond therebetween being electrostatic in nature,

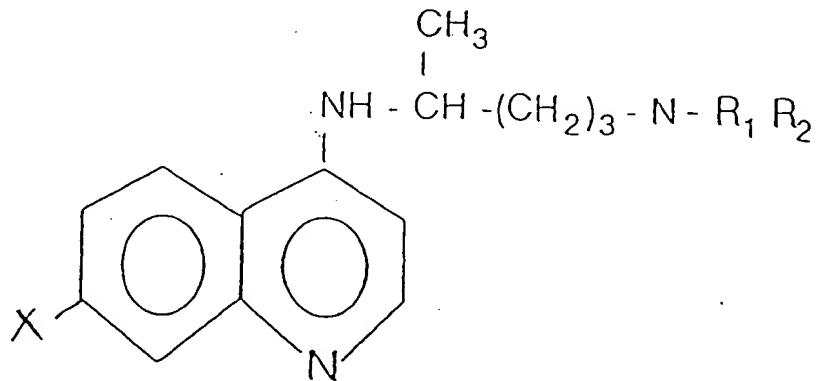
the polymeric conjugate containing a polylysine formed from monomers having free NH₃⁺ groups,

at least 10% of free NH₃⁺ groups of the said polylysine are substituted by residues which can be protonated in a weakly acid medium causing destabilization of cell membranes,

and optionally some of the free NH₃⁺ groups of the said polylysine can be substituted by a molecule with a recognition signal recognized by a cell membrane receptor,

with the proviso that all the free NH₃⁺ groups of the said polylysine make up at least 30% of the number of monomers of the skeleton of the polymeric conjugate,

wherein said residue causing destabilization of cell membrane in a weakly acid medium belong to the family of quinolines of the formula:



in which R₁ is hydrogen, R₂ is -(CH₂)_n-CO₂-H, X is hydrogen or

chlorine and n is an integer from 1 to 10, wherein said recognition signal is selected from the group consisting of:

simple osides selected from the group consisting of α or β conformers of 2-deoxy, of 2-amino or 2-deoxy, 2-acetamido neutral monosaccharides; α or β conformers of glycuronic acid derivatives of neutral monosaccharides; α or β conformers of L-iduronic acid, of keto-deoxy-octonic acid, of N-acetyl neuraminic acid, or of N-glycoloyl-neuraminic acid; and α or β conformers of neutral 6-deoxy monosaccharides;

or a disaccharide selected from the group consisting of lactose and mannopyranosyl α -6-mannopyranose,

or complex osides selected from the group consisting of Lewis^a, Lewis^b, Lewis^x, oligomannosides and oligolactosamines or peptides.